Developing a Salinity Program

Establishing Project Protocol

Develop procedures to be followed to ensure compliance with Administrative Procedures Act, Water Code, Office of Administrative Law requirements and federal Clean Water Act.

Develop technical procedures to be followed by all parties in compiling, collecting and using data.

Typical Steps to Developing a Basin Plan Amendment

Many of the tasks required to develop a Basin Plan Amendment will go through the following steps:

- Compile all relevant data
- Screen out bad data
- Identify new data/research that is needed
- Conduct monitoring/research to develop new information
- Evaluate data
- Identify and evaluate alternatives through-
    - Modeling
    - Cost analysis
    - Analysis of environmental impacts
- Draft a report with proposed Basin Plan Amendment and all of the above information
- Send out for public review/comment
- Obtain peer review
- Respond to comments

Proceed to workshops and hearings

Defining Beneficial Uses

The Basin Plan has a partial list of water bodies in the Region.
For all listed waters, reassess the designated beneficial uses. Compile information for adding uses. For any proposed deletions, develop a use attainability analysis to support the change.

Identify and characterize all unlisted water bodies subject to salinity impacts.
Compile/develop information supporting proposed beneficial uses.

Establishing Water Quality Objectives

Establish numerical water quality objectives for salinity and nitrate for all listed surface waters and groundwaters.

Establish the appropriate constituents for assessing salinity.

Developing an Implementation Plan

Compile/develop information on efficacy, costs and environmental impacts of both on-site and off-site treatment, storage and disposal options.

Define steps that must be taken by point source dischargers to minimize salt in discharges.

Compile/develop information on steps that can be taken to minimize impacts from nonpoint source dischargers.

Conduct assessment of ongoing salinity control efforts – costs and effectiveness

Evaluate potential local, area wide and regional salinity management options.

Identify and develop joint efforts
- Real-time management for surface water discharges
- Regionalization
- Integrated regional water management
- Out-of-Valley Drain

Identify actions that are or could be conducted through non-regulatory actions

Identify alternative implementation approaches
- Evaluate expected outcomes (modeling)
- Evaluate costs
- Evaluate environmental impacts & mitigation alternatives

Establish regulatory requirements for each discharger type and geographic area, including deliverables and deadlines.

Identify types of discharge and/or geographic areas where a conditional prohibition of discharge is needed to protect beneficial uses.

Develop new/revised nitrate and salinity control policies as needed.
- For example, should a salt balance be required?

Identify recommended actions for other agencies.

Problem Definition, Research, Data and Monitoring

Identify and prioritize data gaps to be filled.

Conduct monitoring to fill data gaps. Identify the types of data needed and build a database or; if existing databases are adequate, a database tool that allows comparison of data from multiple sources.

Compile information on the location and extent of water bodies already impacted by nitrate and salt.

Evaluate where the current Basin Plan and regulatory programs have and have not been effective in protecting beneficial uses.

Identify sources and fate of salt.

Design a surface water and groundwater monitoring system that will help define the extent of the salinity problems in the region as well as track trends and assess efficacy of salinity control efforts. Evaluate opportunities to coordinate with existing monitoring efforts and add to existing programs or develop new programs where needed.